

***Muhlenbergia glomerata* (Willd.) Trin.**

marsh muhly
Poaceae (Grass Family)

Status: State Sensitive

Rank: G5S1S2

General Description: Adapted from Cronquist et al. (1977): Perennials from long, creeping, scaly rhizomes. Culms tall, 12 to 48 inches, erect, unbranched or sparingly branched, hollow, slightly compressed, the internodes finely puberulent. Sheaths slightly keeled, scaberulous to glabrous. Ligules short, $<1/16$ inch long, membranous, erose-ciliate. Blades flat, usually $1/16$ to $1/4$ inch broad and $2\frac{1}{2}$ to 6 inches long, scaberulous. Panicles $3/4$ to $4\frac{1}{2}$ inches long, narrow and spike-like, somewhat lobed with densely clustered spikelets. Spikelets 1-flowered, green to purplish. Glumes subequal, long, $1/8$ to $1/4$ inch long, usually exceeding the lemma, narrow, tapering into a short awn (included in the measurement). Lemma $1/16$ to $1/8$ inch long, 3-nerved, acuminate, pubescent on the nerves and margins, sometimes nearly to the tip, awnless or sometimes with a short awn tip. Callus bearded, the hairs $<1/16$ inch long. Palea about the same length as the lemma. Anthers small, $<1/16$ inch long. Caryopsis $1/16$ inch long, cylindrical.

Identification Tips: *Muhlenbergia glomerata* closely resembles *M. racemosa*. The two can be separated based on culm and lemma pubescence and ligule length. The internodes of *M. racemosa* are smooth and polished as opposed to dull and puberulent and the lemmas of *M. racemosa* are pilose at the base only, as opposed to at the base and up the margins in *M. glomerata*. The ligules are shorter in *M. glomerata* ($<1/16$ inch vs. $>1/16$ inch). The two species also occupy different habitats. *M. glomerata* is confined to moister, non-disturbed habitats. *M. racemosa* is found in drier, disturbed sites.

Phenology: Identifiable July through August.

Range: Occurs in British Columbia to Newfoundland and south to Nevada, Utah, Colorado, Nebraska, Illinois, West Virginia, and North Carolina. Currently known in Washington from Pend Oreille County, in the Okanogan Highlands physiographic province. Historically, the species was known from Spokane County in the Columbia Basin physiographic province.

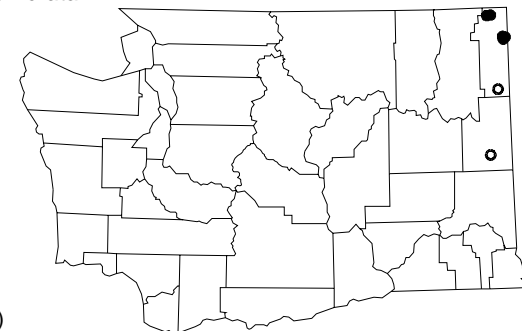
Muhlenbergia glomerata

marsh muhly



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Known distribution of
Muhlenbergia glomerata in
Washington



● Current (1980+)
○ Historic (older than 1980)

Muhlenbergia glomerata

marsh muhly



Photo by
Kirk Larson - USFS



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Kirk Larson - USFS

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Habitat: Known to occur along streambanks, meadows, marshes, bogs and the shores of ponds and lakes. Elevation ranges from 2900 to 3500 feet (WA). Associated species in Washington include *Sphagnum* sp., *Betula glandulosa*, *Salix* spp., *Trientalis arctica*, *Eriophorum* sp., *Carex* spp. (including several rare species), and *Juncus* sp.

Ecology: *Muhlenbergia glomerata* is identified as a facultative wetland species (USFWS 1988).

State Status Comments: There are very few known occurrences of this species in Washington.

Inventory Needs: Additional inventory is needed throughout the state in undisturbed habitats. All known occurrences need to be revisited.

Threats and Management Concerns: Threats to the taxon include hydrologic change (damming or diking), ground disturbing activities (logging and grazing), and herbicide application.

References:

Cronquist, et al. 1977. *Intermountain Flora: Vascular Plants of the Intermountain West, U.S.A. Volume Six, Monocotyledons*. New York Botanical Garden, New York. 584 pp.

Hitchcock, C. L., A. Cronquist, M. Ownbey, and J.W. Thompson. 1969. *Vascular Plants of the Pacific Northwest, Part 1: Vascular Cryptogams, Gymnosperms, and Monocotyledons*. University of Washington Press, Seattle. 914 pp.

U.S. Fish and Wildlife Service. 1988. National list of vascular plant species that occur in wetlands. USFWS Biological Report 88 (24).